

WHAT IS CLAIMED IS:

1. A system for generating an enhanced data grouping, comprising:
an input interface receiving clinically relevant source data;
a set of rules; and
a data enhancement layer, communicating with the input interface and the set of rules, the data enhancement layer generating an enhanced data grouping based on the clinically relevant source data and the set of rules.
2. A system according to claim 1, wherein the clinically relevant source data comprises data generated by at least one of a health care provider, a hospital, an insurer and a laboratory.
3. A system according to claim 1, wherein the set of rules comprises a set of user-defined rules.
4. A system according to claim 1, wherein the set of rules comprises a set of rules based on at least one autocorrelation function executed on the clinically relevant source data.
5. A system according to claim 1, wherein the data enhancement layer comprises a server configured to generate and store the enhanced data grouping.
6. A system according to claim 1, wherein the enhanced data grouping comprises an extension to the clinically relevant source data.
7. A system according to claim 6, wherein the extension to the clinically relevant source data comprises at least one extended dimension appended to the clinically relevant source data.
8. A system according to claim 7, wherein the at least one extended dimension comprises a recombination of clinically relevant source data based on selected source data attributes.

9. A system according to claim 7, wherein the at least one extended dimension comprises multiple extended dimensions.
10. A system according to claim 1, wherein the clinically relevant source data comprises at least one of hierarchical source data and multidimensional source data.
11. A system according to claim 10, wherein the data enhancement layer processes both hierarchical source data and multidimensional source data.
12. A system according to claim 1, wherein the data enhancement layer stores the enhanced data grouping to a transactional data store.
13. A system according to claim 12, wherein the enhanced data grouping is communicated to a datamart.
14. A system according to claim 13, wherein the datamart is configured to receive queries.
15. A system according to claim 14, wherein the queries comprise standard query language queries.
16. A method for generating an enhanced data grouping, comprising:
 - receiving clinically relevant source data;
 - accessing a set of rules; and
 - generating an enhanced data grouping based on the clinically relevant source data and the set of rules.
17. A method according to claim 16, wherein the clinically relevant source data comprises data generated by at least one of a health care provider, a hospital, an insurer and a laboratory.

18. A method according to claim 16, wherein the set of rules comprises a set of user-defined rules.
19. A method according to claim 16, wherein the set of rules comprises a set of rules based on at least one autocorrelation function executed on the clinically relevant source data.
20. A method according to claim 16, wherein generating the enhanced data grouping comprises generating an extension to the clinically relevant source data.
21. A method according to claim 20, wherein the generating an extension to the clinically relevant source data comprises appending at least one extended dimension to the clinically relevant source data.
22. A method according to claim 21, wherein the appending at least one extended dimension comprises generating a recombination of clinically relevant source data based on selected source data attributes.
23. A method according to claim 21, wherein the appending at least one extended dimension comprises appending multiple extended dimensions.
24. A method according to claim 16, wherein the clinically relevant source data comprises at least one of hierarchical source data and multidimensional source data.
25. A method according to claim 16, wherein the generating an enhanced data grouping comprises processing both hierarchical source data and multidimensional source data.
26. A method according to claim 16, further comprising storing the enhanced data grouping to a transactional data store.

27. A method according to claim 26, further comprising communicating the enhanced data grouping to a datamart.
28. A method according to claim 27, wherein the datamart is configured to receive queries.
29. A method according to claim 28, wherein the queries comprise standard query language queries.
30. A system for generating an enhanced data grouping, comprising:
 - input means for receiving clinically relevant source data;
 - rules means for storing a set of rules; and
 - data enhancement means, communicating with the input means and rules means, the data enhancement means generating an enhanced data grouping based on the clinically relevant source data and the set of rules.
31. A system according to claim 30, wherein the enhanced data grouping comprises an extension to the clinically relevant source data.
32. A system according to claim 31, wherein the extension to the clinically relevant source data comprises at least one extended dimension appended to the clinically relevant source data.
33. A system according to claim 32, wherein the at least one extended dimension comprises a recombination of clinically relevant source data based on selected source data attributes.
34. A system according to claim 32, wherein the at least one extended dimension comprises multiple extended dimensions.

35. A system according to claim 30, wherein the clinically relevant source data comprises at least one of hierarchical source data and multidimensional source data.
36. A system according to claim 30, wherein the enhanced data grouping is communicated to a datamart.
37. A system according to claim 36, wherein the datamart is configured to receive queries.
38. An enhanced data grouping, comprising:
clinically relevant source data; and
at least one extended dimension appended to the clinically relevant source data, the at least one extended dimension being generated based on attributes of the clinically relevant source data and a set of rules.
39. An enhanced data grouping according to claim 38, wherein the at least one extended dimension comprises multiple extended dimensions.
40. An enhanced data grouping according to claim 38, wherein the clinically relevant source data comprises at least one of hierarchical source data and multidimensional source data.
41. An enhanced data grouping according to claim 38, wherein the enhanced data grouping is communicated to a datamart.
42. An enhanced data grouping according to claim 41, wherein the datamart is configured to receive queries.
43. A queryable datamart, comprising:
an enhanced data grouping, the enhanced data grouping comprising-

clinically relevant source data; and

at least one extended dimension appended to the clinically relevant source data, the at least one extended dimension being generated based on attributes of the clinically relevant source data and a set of rules; and

an interface to a query engine to interrogate the enhanced data grouping.

44. A datamart according to claim 43, wherein the query engine comprises a standard query language engine.

45. A datamart according to claim 43, further comprising a user interface communicating via a network with the query engine.